6.0 ENVIRONMENTAL COMPLIANCE

6.1 OVERVIEW

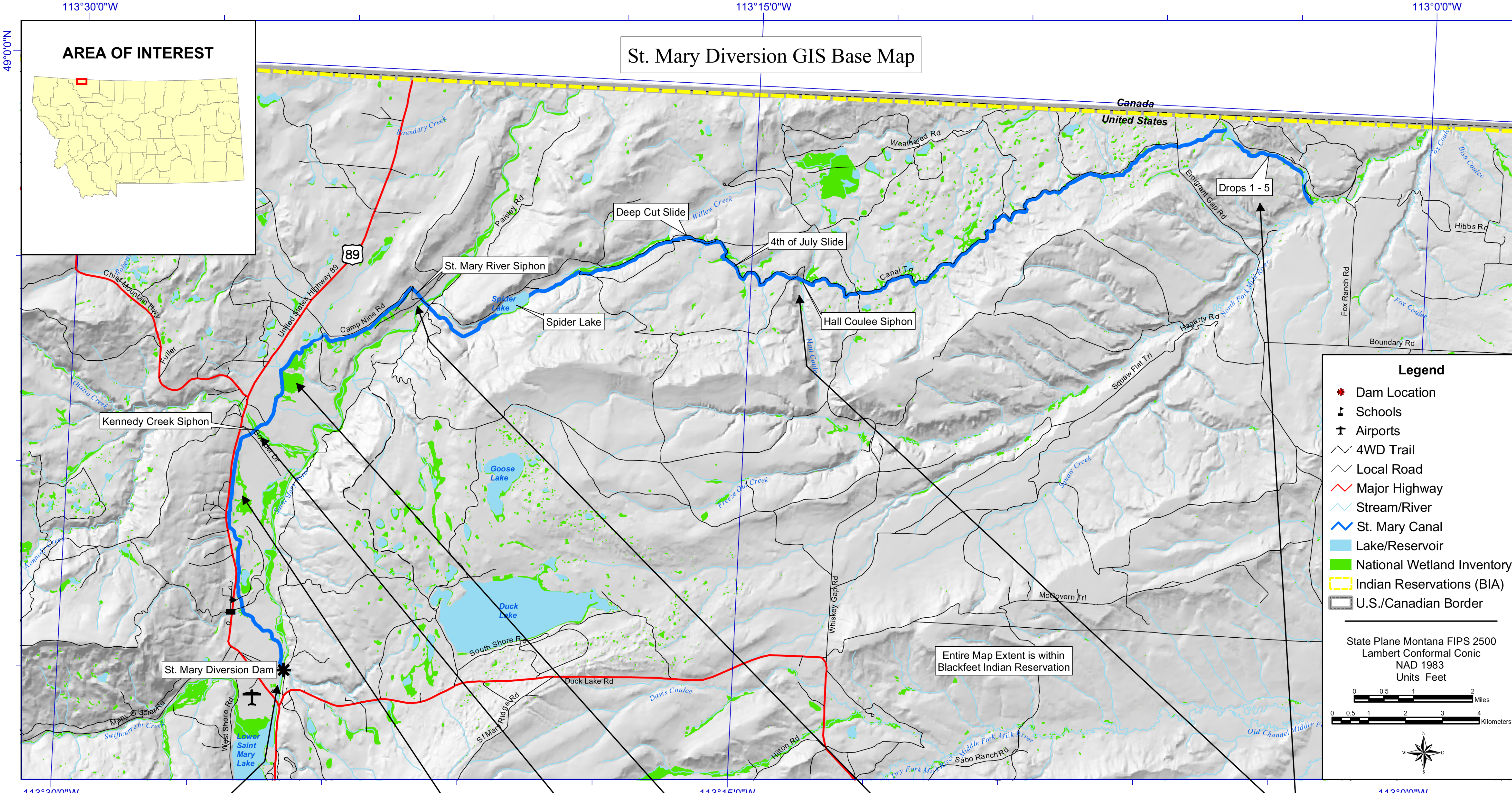
Existing environmental information is limited for the project area. The Bureau of Reclamation (BOR) recently published a Regional Feasibility Report that included the St. Mary Rehabilitation and provided a general summary of environmental effects. A limited-scope Environmental Assessment was produced in 1990 on canal maintenance involving vegetation removal. The State of Montana has some GIS coverages for the project area, including wetland mapping from the National Wetland Survey. Project GIS mapping has been initiated based on this available information (see Figure 6.1).

Environmental issues related to irrigation facility rehabilitation are primarily centered on the cultural resources, fish and wildlife resources, and water resources of the project area. The BOR has been conducting research on bull trout related to the St. Mary Diversion; reports are available.

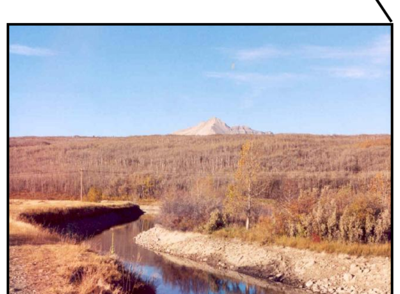
A preliminary environmental process is defined, outlining potential roles of the Blackfeet Tribe and other Stakeholders, including Federal Agencies. The permitting will follow Blackfeet Tribe permitting procedures. The Blackfeet Tribe will be involved in the entire environmental process. The Bureau of Reclamation (BOR) will be the lead agency for the National Environmental Policy Act (NEPA) process. At this time, a NEPA Environmental Assessment is scoped as the appropriate documentation; however, if environmental impacts are significant, an Environmental Impact Statement (EIS) may be warranted.

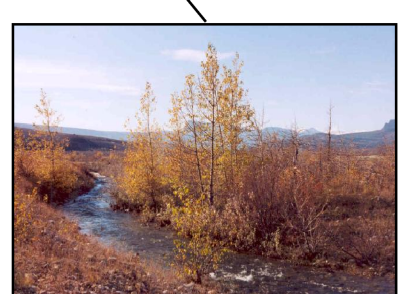
The United States Fish and Wildlife Service (USFWS) will be a key agency in the implementation of the Fish and Wildlife Coordination Act (F&WCA) and the Endangered Species Act. An expected outcome of following the F&WCA will be the avoidance, minimization, and mitigation of impacts to biological resources.

The Tribal Historic Preservation Office and/or the State Historic Preservation Office will be involved with cultural resource clearances.


St. Mary Diversion GIS Base Map
AREA OF INTEREST
113°30'0"W
113°15'0"W
113°0'0"W
49°0'0"N
Canada
United States
Deep Cut Slide
4th of July Slide
St. Mary River Siphon
Spider Lake
Hall Coulee Siphon
Drops 1 - 5
Kennedy Creek Siphon
St. Mary Diversion Dam
Entire Map Extent is within
Blackfeet Indian Reservation
Boundary Creek
Paisley Rd
89
United States Highway 89
Camp Nine Rd
Chief Mountain Hwy
Fuller
Otatso Creek
Willow Creek
Weathered Rd
Canal Trl
Emigrant Gap Rd
Hibbs Rd
Fox Ranch Rd
Fox Coulee
Bish Coulee
Boundary Rd
Hagarty Rd
North Fork Milk River
Squaw Flat Trl
Squaw Creek
Hall Coulee
Freeze Out Creek
Goose Lake
Duck Lake
South Shore Rd
Duck Lake Rd
Whiskey Gap Rd
McGovern Trl
Davis Coulee
St Mary Ridge Rd
Hilton Rd
Sabo Ranch Rd
Middle Fork Milk River
Dry Fork Milk River
Old Channel Middle Fork
Saint Mary River
Kennedy Creek
Many Glacier Rd
Swiftcurrent Creek
West Shore Rd
Lower Saint Mary Lake
Legend
Dam Location
Schools
Airports
4WD Trail
Local Road
Major Highway
Stream/River
St. Mary Canal
Lake/Reservoir
National Wetland Inventory
Indian Reservations (BIA)
U.S./Canadian Border
State Plane Montana FIPS 2500
Lambert Conformal Conic
NAD 1983
Units Feet
0 0.5 1 2 Miles
0 0.5 1 2 3 4 Kilometers


Bull Trout issues at St. Mary Diversion and other areas


Riparian and upland habitat adjacent to canal


Riparian habitat along stream return flow


Wetland habitat flooding area adjacent to canal


Historic bridge at St. Mary River crossing


Wetland crossing at Hall Coulee Siphon


Water quality issues at Milk River

Figure 6.1

The purpose of this work is to outline the environmental process necessary to obtain permits for replacement and/or rehabilitation of the St. Mary Diversion Facilities.

6.2 EXISTING ENVIRONMENTAL DATA

Our understanding of existing environmental data was based on face-to-face interviews conducted with the Blackfeet Tribe and the Bureau of Reclamation. We also conducted phone interviews with the, Montana Department of Natural Resources and Conservation, Environmental Protection Agency, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service, as well as project staff for the engineering design of the project.

These interviews sought to identify existing environmental data, identify environmental issues pertinent to the project, and define the environmental permitting process.

6.2.1 Existing Information and Reports

Several reports were reviewed in developing the environmental roadmap for this project. Several are listed below with brief summaries on content and relevancy to the project.

- ***Regional Feasibility Report, North Central Montana*** (2004, October). U.S. Bureau of Reclamation, Montana Area Office, Billings, Montana. The Chippewa Cree Tribe of the Rocky Boy's Reservation Indian Reserved Water Rights Settlement and Water Supply Enhancement Act of 1999 (Public Law No. 106-103) directed BOR to conduct a regional feasibility study of north central Montana. The purpose of the study was to identify present and potential water supplies, water uses and management, major water-related issues, and opportunities to resolve these issues.

  The study found that the St. Mary Canal System enhancements alternative is the only alternative that would significantly address the water supply and related issues of north central Montana and that would produce positive economic benefits. The other five alternatives considered in the report would contribute to the water supply on a much smaller scale and would not produce net economic benefits when only agriculture is considered.

Environmental effects identified by the BOR (2004) for St. Mary System Enhancements included:

- Positive effect on the Milk River Irrigation Water Supply
- Positive effect on the municipal, rural, and industrial (MR&I) Water Supply
- Slightly positive effect on Threatened and Endangered Species assuming bull trout mitigation occurs with fish passage, entrainment protection at the diversion site and winter releases of flows from Sherburne Dam. Grizzlies could benefit from habitat enhancement due to water in wetlands and the riparian corridor or could be negatively impacted if canal rehabilitation results in a loss of existing wetlands. Piping plover had potential negative and positive effects, depending on water management practices. Pallid sturgeon and other species might benefit from higher spring flows in the lower Milk River.
- Slightly positive effect on water quality with higher flows and lowering of contaminant concentrations.
- Positive effects on water rights issues with Fort Belknap Reserved Water Rights, Blackfeet Reserved Water Rights, and Water for Bowdoin National Wildlife Refuge.
- Positive effects on fish and wildlife species with more water in the Milk River Basin, including downstream reservoirs.
- Positive effects on recreation in downstream river reaches and reservoirs.
- Positive effects on hydropower opportunities at canal drop structures and at Fresno dam, downstream.

- ***Environmental Assessment*** (1990, September 28). St. Mary Canal Milk River Project, Montana. Bureau of Reclamation, Great Plains Region, Billings, Montana. This report discussed the impacts to listed species from the continued operation and maintenance clearing of vegetation along the canal by the BOR. The EA cited the 1987 BIA and Blackfeet Tribe research on Grizzly bears and the researchers' intuitive conclusion that bears use the riparian corridor along the canal for travel routes. The EA concluded that selection of a alternative that was a compromise between no maintenance action and following strict BOR clearing policy would result in no significant impacts on grizzly bear and gray wolf.
- ***Draft Environmental Assessment Rocky Boy's/ North Central Montana Regional Water System*** (2004, March 25). A Joint NEPA/MEPA Compliance Document. Lead Agency: U.S.

Bureau of Reclamation, Cooperating Agency: U.S. Bureau of Indian Affairs Montana Department of Natural Resources and Conservation Montana Department of Environmental Quality. This report provides an example of the type of NEPA document that has been recently produced by the BOR on water resource projects. The BOR staff recommended this as a good example to follow for the St. Mary project, assuming an Environmental Assessment is the chosen NEPA document. The data does not apply to the St. Mary's project area.

- ***Finding of No Significant Impact*** (2002, August). Final Programmatic Environmental Assessment Fort Peck Reservation Rural Water System, Fort Peck Reservation and Dry Prairie Service Areas. Department of Interior, Bureau of Reclamation Montana Department of Natural Resources and Conservation, Montana Department of Environmental Quality. This report provides an example of the type of NEPA document that has been recently produced by the BOR on water resource projects. It also contains an example of using the Fish and Wildlife Coordination Act procedures in reducing project impacts. The BOR staff recommended this as a good example to follow for the St. Mary project, assuming an Environmental Assessment is the chosen NEPA document. The data does not apply to the St. Mary's project area.
- ***Fish and Wildlife Coordination Act*** [Chapter 55, approved March 10, 1937, 48 stat. 491] [As Amended Through P.L. 108-204, March 2, 2004]. (2004, March 2). The BOR staff recommended this process as the preferred approach to avoiding, minimizing, and providing effective mitigation for environmental impacts associated with the St. Mary project.
- ***Bull Trout (Savelinus confluentus) Use of Tributaries of the St. Mary River, Montana.*** Mogen, J. T., & Kaeding, L. R. (2004, May). U.S. Bureau of Reclamation, Billings, Montana This report concludes that operation of the St. Mary's facilities is negatively affecting the bull trout in the St. Mary's drainage. This report also details out the recommendations to improve conditions for bull trout directed at the facilities and operation.
- **Bull Trout (Salvelinus confluentus) in the St. Mary River Drainage, Montana and Alberta,** A Progress Report Based on Field Investigation Conducted During 1997-2002. Mogen, J. T., & Kaeding, L. R. (2003, October). U.S. Bureau of Reclamation, Billings, Montana. This very comprehensive report concludes that operation of the St. Mary's facilities is negatively affecting the bull trout in the St. Mary's drainage. This report takes a

very close look at fish populations, distributions, and species in the St. Mary's drainages and impacts from the operation of the current facilities.

- **Fish entertainment Investigations at the St. Mary Diversion Dam, St. Mary River Montana.** A Progress Report Based on Field Investigation Conducted in 2002. Mogen, J. T., & Kaeding, L. R. (2002, December). U.S. Bureau of Reclamation, Billings, Montana. This report focuses on the entrainment of fish into the canal from the existing sub-standard facilities. The report documents that many species and sizes of fish including bull trout are entering the canal. This report recommends temporary screening options for installation at the diversion and identified issues associated with use and sampling.

6.2.2 Resource Agency Interviews

Our understanding of existing environmental data was based on face-to-face interviews conducted with the Blackfeet Tribe and the Bureau of Reclamation. We also conducted phone interviews with the, Montana Department of Natural Resources and Conservation, Environmental Protection Agency, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service, as well as project staff for the engineering design of the project.

Blackfeet Tribe

A meeting was held at Tribal offices in Browning on November 30, 2004 with Blackfeet Environmental Staff to discuss environmental issues. This summary attempts to concisely document relevant Blackfeet Tribe information to guide the environmental process for the rehabilitation project. It is not intended to be a meeting transcript.

Who will be the project contacts?

Tribal Contact for Environmental Topics: Barry Adams – Blackfeet Environmental Office-406-338-7421. Entranco can work directly with Barry as long as Erling Juel is kept in the communication coordination.

John Murray is the point of contact for cultural resources.

For overall project permitting, and Tribal Council topics – Barry will refer to Mike Tatsy and Pat Thomas of the Tribe for direction.

Who will be the lead agency for NEPA Environmental Documentation?

The consensus was that a partnership between the Tribe and the Bureau of Reclamation.

The Tribe is interested in a multiple agency signature page on the environmental documentation. This could imply co-lead NEPA status or Cooperating Agency NEPA status.

The Tribe is uncertain about the role of the Bureau of Indian Affairs (BIA).

The Tribe clearly stated that the State of Montana has no permitting authority on the reservation.

The Tribe expressed interest in being involved with the environmental process, including data collection (wetland delineations) and cultural resources. They do not have an environmental consultant; they would like to use tribal staff/members.

The Tribe will recognize procedures of the Endangered Species Act.

The Tribe has its own Cultural Resources Ordinance and Tribal Historic Preservation Office (THPO).

What environmental procedures will the Blackfeet Nation recognize and do they have their own procedures?

The Blackfeet Nation has an environmental policy and permitting process through their Environmental Department. Ordinance 90-A contains policy, permitting procedures, permitting costs, contractor requirements, etc. The Nation recognizes NEPA processes and has cooperated with the Bureau of Reclamation and other agencies. They also work with other agencies, such as the Army Corps of Engineers and the US Fish and Wildlife Service.

In regard to cultural resources, the Tribe has a working relationship with the Montana State Historic Preservation Office.

What environmental baseline information is available from the Tribe?

There are preliminary wetland maps from the National Wetland Inventory from our project termini – St. Mary's Diversion downstream to the canal's confluence with the Milk River. These maps have not been field verified.

There are separate studies being conducted upstream for fish and other aquatic organisms. This includes the work on Boulder Creek, Swift Creek, and Sherburne Reservoir. Geomorphologic work, including sediment loads, stream cross-sections, etc. has been conducted.

The Tribe has been working on a preliminary Environmental Comprehensive Plan. It has not been adopted or reviewed, nor do we understand if it has information that can be used in our report.

Tribe has a water quality non-point assessment.

Bureau of Reclamation

A meeting was held at BOR offices in Billings on December 9, 2004 to discuss the project. This summary attempts to concisely document relevant Bureau of Reclamation (BOR) information to guide the environmental process for the rehabilitation project. It is not intended to be a meeting transcript.

Who will be the project contacts?

BOR Contact for Environmental Topics: Tom Sawatzke - 406-247-7314. Entranco can work directly with Tom as long as Erling Juel is kept in the communication coordination.

Other BOR environmental staff includes:

Jeff Baumberger – NEPA documentation.

Sue Camp – Fisheries - ESA

Bill Vincent - contact for cultural resources.

Other Blackfeet Tribal staff noted by BOR include Gail Skunkcap – ESA; and Dan Carney – bear biologist

Who will be the lead agency for NEPA Environmental Documentation?

Bureau of Reclamation will be the lead agency for NEPA.

The potential exists for the Bureau of Indian Affairs (BIA), US Fish & Wildlife Service (USFWS), and the Environmental Protection Agency (EPA) to be cooperating agencies for NEPA.

BIA contacts are Doug Davis and Mike Black (406) 247-7998

USFWS contact is Mark Wilson, Field Supervisor, Helena.

EPA contact is John Wardell in Helena

The Blackfeet Tribe and the Montana DNRC would be key stakeholders for the NEPA documentation. Their role can be established to be part of important milestones.

The BOR was not sure on which type of NEPA document to produce. Two examples were provided of recent NEPA EAs (Rocky Boy's and Ft. Peck Regional Water Systems). The BOR (Tom Sawatzke) recommended that the project follow the provisions of the Fish and Wildlife Coordination Act (see references below) in order to develop project alternatives that would avoid and minimize environmental impacts. This is an early coordination process that allows the BOR to fund the USFWS to collaborate early in the project. The process was used on the Ft. Peck Reservoir project. The outcome of this process would help determine the type of NEPA document needed. He recommended we contact USFWS – Mark Wilson – 406-449-5225 – Ext. 205; Brent Esmiol – Ext 215; or Lou Hanaberry for further information on this approach.

Jerry Moore (recently retired BOR engineer for St. Mary Project) said project rehabilitation permitting was coordinated with the Tribe, EPA, ACOE, and BOR during 2 meetings per year.

Endangered Species Act (ESA)

The BOR has place priority in Endangered Species Act compliance for the St. Mary Rehabilitation.

The BOR and US Fish and Wildlife Service are collaborating through informal consultation on bull trout research for the St Mary Rehabilitation. Key issues include:

- No winter flows in Swiftcurrent Creek immediately downstream of Sherburne Reservoir. Modifications to the dam to allow winter releases are being studied.
- Fish passage through the St. Mary Diversion Dam
- Fish entrainment in the St. Mary Canal.

BOR recognizes Federal, State of Montana and Tribal environmental regulations and procedures.

What environmental baseline information is available from the BOR?

BOR's understanding was that all available environmental references were provided to Montana DNRC. Montana DNRC had prepared a list of BOR references they have identified. Most of these documents were forwarded to the DNRC consultant team. One item on the list referred to a compilation of environmental reports. We confirmed that the TD&H team did not receive this information.

Dale Anderson, with consultant team, also asked about a reference listed in the Alternatives Report, referring to an EA produced for vegetation removal along the St. Mary Canal and its impact to the grizzly bear. BOR will try to locate the document and others listed during the meeting.

BOR has air photos and infrared photos of the project corridor (1-inch to 200-feet) taken on 10-23-93. They also have another flight taken in 1997. The earliest flight was taken in 1947 by the SCS.

The BOR is planning to prepare GIS mapping of the land ownership along the St. Mary project. Paul Azevedo recommended looking into the State's NRIS system for natural resource coverage's in GIS.

BOR also provided two examples of their EAs on their projects: 1) Final Programmatic Environmental Assessment – Fort Peck Reservation Rural Water System Fort Peck Reservation

and Dry Prairie Service Areas. 2) Draft Environmental Assessment Rocky Boy's / North Central Montana Regional Water System.

BOR also provided the September 2004 listing of ESA species for Montana counties.

BOR also provided an outline of "Service Fish and Wildlife Coordination Act Involvement" and a document by USFWS entitled "Issues in Fish and Wildlife Planning – Water Resource Planning Under the Fish and Wildlife Coordination Act".

A list of additional documents was recorded at the meeting; the BOR will try to locate and forward these documents to DNRC for the consultant team.

Cultural Resources

Bill Vincent, cultural resource staff for the BOR, said the following information would be needed for environmental documentation for cultural resources:

- Engineering facility history - The BOR has a 3-volume binder of the history of the St. Mary Project. It does not completely fulfill 106 National Historic Preservation Act requirements for the historical component for the cultural resource clearance for the St. Mary Rehabilitation.
- Class 3 survey for impacted areas
- Traditional cultural issues

Bill recommended doing a programmatic agreement (memorandum of understanding – MOU) on how cultural resources investigations are done as the St. Mary Rehabilitation progresses. The agreement should include the Tribal Council, THPO, BIA, and BOR.

Environmental Protection Agency

John Wardell of the USEPA suggested that if the NEPA product was going to end up being a Categorical Exclusion or an EA, they would probably not play a large role or formally participate as a cooperating agency. He noted that the Bureau of Reclamation has a NEPA process and that

the Blackfeet Nation would be involved, so the EPA didn't really see that there was much of a necessity to get involved.

If, however, any part of the project came to the point of becoming a full EIS, they would want a reviewing role. Mr. Wardell asked that we contact him in the future, particularly if our scoping identifies anything that might result in the production of an EIS. He also suggested that they might want to be updated about the NEPA process informally, just so they would be able to manage their work load should they need to become more involved with the project.

Bureau of Indian Affairs

Doug Davis and Rick Stefanic of the Bureau of Indian Affairs (BIA) office in Billings, Montana commented regarding the role of the BIA in the environmental process. The BIA would like to be a formal cooperator in the NEPA process, and accept that the Bureau of Reclamation would be the lead agency. Their concern lies with representation of the Blackfeet Nation and with their own NEPA reviews that might promulgate from the project. One of their primary concerns is the duplication of effort that would come about if they were not to sign off on the NEPA document, and a subsequent change in status of some Indian Trust lands was to be required. A separate study and NEPA process would have to be undertaken for an exchange or lease of Trust ground, and they feel that it would be most expedient for them to be involved from the beginning of the process.

National Park Service

Mary Riddle, the environmental officer for the National Park Service (NPS) in Glacier National Park, suggested that there were no pressing issues that would directly affect conditions in the Park. Therefore, she did not see the NPS becoming a formal cooperator in the NEPA process. However, since the Park shares a boundary with the Blackfeet Nation, she felt that it would be in everyone's best interest that the Park is kept informed as to the progress of the environmental side of the project. Naturally, if any issues were to be uncovered during the course of the NEPA process that might directly affect conditions within the Park, they would want to be informed.

Fish and Wildlife Service

Mark Wilson and Lynn Kaeding of the US Fish and Wildlife Service (USFWS) communicated the process their agency would like to follow for Endangered Species Act Section 7 consultation as well as more general fish and wildlife impact assessment procedure for a project of this type. The USFWS would like the project participants to conduct standard section 7 consultation for Threatened and Endangered Species as well as prepare a report for compliance of the Fish and Wildlife Coordination Act (FWCA), which pertains to all wildlife species potentially affected by the project. The FWCA compliance report would determine the mitigation goals and commitments for the all species found to require mitigation measures. The Report would be initiated in response to a planning document sent to the USFWS from the lead agency. The goal of the report would be concurrence signatures from all cooperating agencies approving the report and the mitigation outlined within it. The FWCA and Section 7 compliance can be prepared concurrently and, depending on the outcome the T&E investigations, portions of the Section 7 consultation can be attached to the FWCA document as technical backup. This process may identify the needs for additional environmental studies for fish and wildlife not completed or to supplement studies already completed.

Montana Department of Natural Resources

The Montana Department of Natural Resources (DNRC) will serve as a reviewing agency for the environmental process and documentation. All elements of the Montana Environmental Policy Act (MEPA) that might apply to the project will be met through the NEPA process. Permitting will be directed through the Blackfeet Nation Ordinance 90-A and through the appropriate federal agencies, so no state procedures are anticipated. The DNRC, as the budgeting and project management agency, will necessarily review all documentation, investigations and permitting, and will have a presence at all meetings pertaining to those aspects of the project. Their comments and revisions will be incorporated with the cooperation of the lead and cooperating agencies.

6.3 PROJECT COMPLIANCE ISSUES

6.3.1 Environmental Issues

Currently the BOR and US Fish and Wildlife Service are collaborating through informal consultation on bull trout research for the St Mary Rehabilitation. Key issues include:

- No winter flows in Swiftcurrent Creek immediately downstream of Sherburne Reservoir; Modifications to the dam to allow winter releases are being studied;
- Fish passage through the St. Mary Diversion Dam;
- Fish entrainment in the St. Mary Canal;

Interviews with the Blackfeet Tribe and the BOR has identified the following list of plants and animals, topics and issues that may required a combination of new data collection, data analysis, and or additional environmental studies to achieve the goals of the NEPA compliance of the project. This list of environmental issues will likely be changed during Scoping (see process below).

The following environmental issues have been identified the following as potentially requiring analysis in the environmental document:

- wildlife crossings of the canal, including elk migration.
- canal lining and how different linings (e.g. concrete, PVC, HDPE) affect wildlife crossings.
- effects of widening or deepening the canal.
- effects of canal fencing.
- effects on grizzly bears, wolves, lynx, bull trout, bald eagle and slender moonwort (plant).
- timing of construction and potential effects on wildlife.
- implications of increasing hunter and other human access to wildlife.
- effects on elk populations with nearby calving areas.
- changes to riparian corridor and wetlands resulting from canal leakage control.
- potential to disrupt sub-irrigation of farmland with canal improvements. Potential to disrupt cattle watering. Potential to eliminate creek flows fed by canal leakage. About 70

to 80 cfs of flow is lost from the canal between the St. Mary diversion dam and the St. Mary siphon.

- concern exists about native plants along the canal and project impacts.
- pondweeds are a maintenance problem downstream of the St. Mary siphon – especially at Spider Lake.
- local runoff at drain inlets area a sediment problem.
- spring water enters the canal between the St. Mary siphon and drop structure #1.
- cultural Resources - Impacts to Tribal spiritual places. For example, a spiritual place is located near the St. Mary Diversion structure. The Tribe knows other important areas.
- concern about water source impacts (quantity and quality) to the Babb School, assuming canal leakage is recharge for local groundwater.
- water quality concerns (primarily sedimentation) in the North Fork of the Milk River resulting from drop structure hydraulics.
- interest in habitat mitigation related to wetlands and wildlife, including waterfowl and other game birds.
- upstream concerns:
- bio-transfer (inter-basin transfer) of unwanted fish species (e.g. troutperch).
- concern about Swiftcurrent Creek and changes in water level, flows, and being de-watered. Also a sediment problem.
- concern about sediment problems in Sherburne Reservoir and Lower St. Mary Lake.
- instream flows in St. Mary River below diversion dam.

6.4 ROADMAP OF ENVIRONMENTAL PROCESS

A roadmap to environmental compliance and permitting for the project is shown in Figure 6.2. The roadmap includes three major environmental coordination areas: 1) Blackfeet Tribe and Federal Agency Coordination, 2) NEPA and NHPA 106 Compliance, and 3) Fish and Wildlife Coordination Act (F&WCA) and Endangered Species Act Compliance.

6.4.1 Blackfeet Tribe/Federal Coordination

Rehabilitation of the St. Mary Diversion and Conveyance facilities is a major project that involves many stakeholders. The Blackfeet Tribe is an important stakeholder because the proposed improvements are located entirely within their reservation boundaries. The Bureau of Reclamation, as owner and operator of the facilities, will be the lead Federal Agency under the National Environmental Policy Act. The Bureau of Indian Affairs will likely be a Cooperating agency due to their role with Indian Trust lands.

The State of Montana, Department of Natural Resources & Conservation has been a facilitator of moving this project forward and working with the St. Mary Rehabilitation Working Group.

The USFWS would like to have a major role in the project alternative development to consider impacts to fish and wildlife through the Fish and Wildlife Coordination Act and the Endangered Species Act (see discussion below).

As shown in Figure 6.2, several decisions are needed to facilitate the rehabilitation and environmental approvals. Stakeholders will be involved in the development of the project's purpose and need and alternative development.

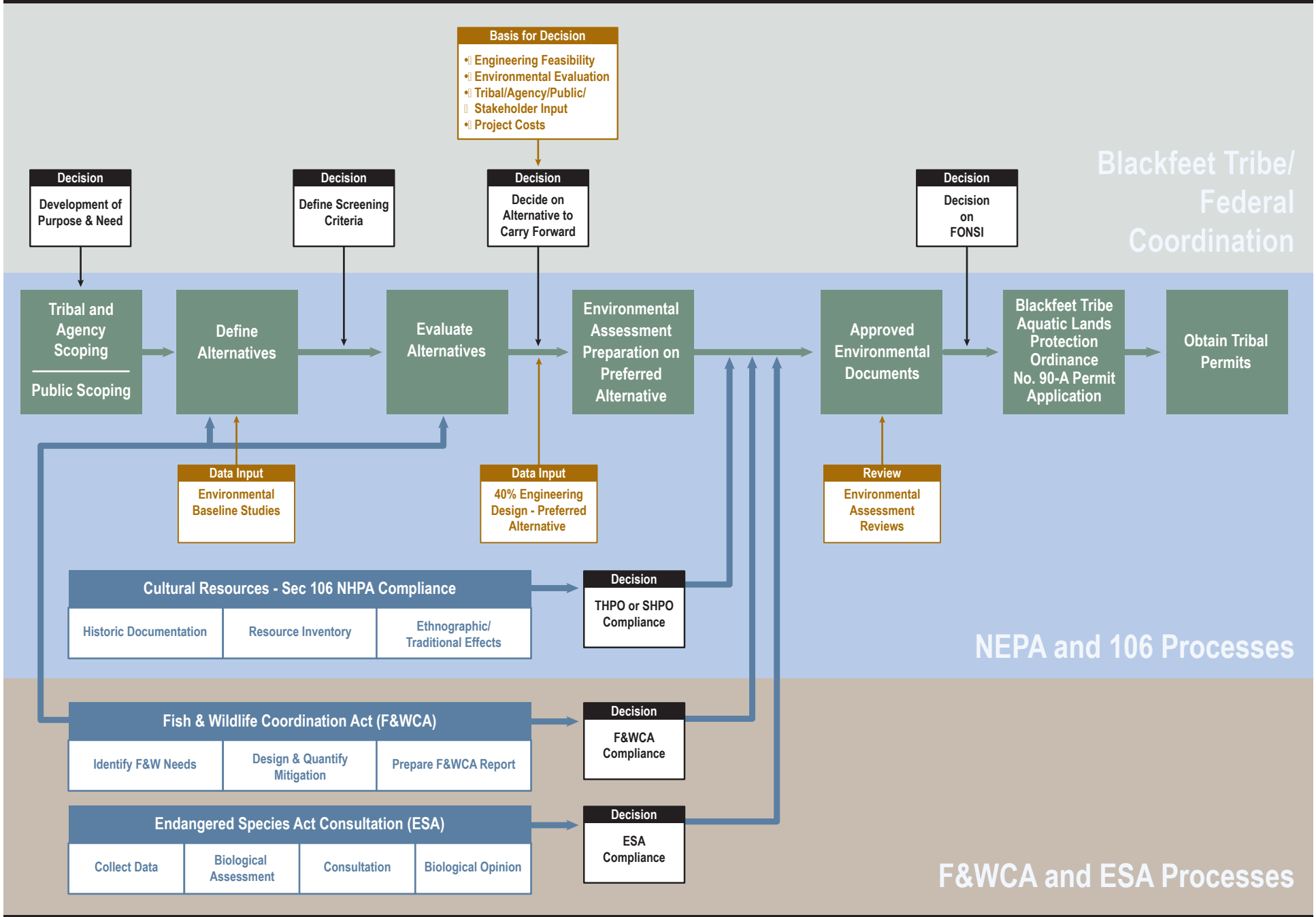
6.4.2 NEPA and NHPA 106 Processes

NEPA Process

For this report, it was assumed that a NEPA Environmental Assessment (EA) would be produced. A critical assumption in EA production is that project impacts can be mitigated to result in a "Finding of No Significant Impact (FONSI)". It is also assumed that the NEPA EA will be adopted for MEPA compliance.

A key step in the process recommended by the BOR is the use of the Fish and Wildlife Coordination Act (F&WCA) to help define the project alternatives that consider fish and wildlife needs (see discussion below). Depending on the outcome of alternative definition, the type of NEPA environmental document may change.

Environmental Permitting Roadmap - St. Mary Diversion Facilities



W:2-85-04160 St. Mary diversion\graphics & images\environmental permitting roadmap.ai (12/22/04) dgb

Figure 6.2

Figure 6.2 shows the environmental documentation steps for NEPA compliance. NEPA steps include: Internal scoping, public scoping, development of the purpose and need, development of project alternatives, development of environmental documents, mitigation plans, public review, and NEPA decision.

Environmental coordination with the BOR, BIA, USFWS, Blackfeet Tribe, DNRC, and the St. Mary Rehabilitation Working Group, and the public will occur to comply with NEPA public involvement guidance. Key points of interaction include: 1) Scoping, 2) Development of Alternatives, and 3) Development of the Environmental Assessment.

The project's purpose and need and reasonable and feasible alternatives will be determined. Agency and public scoping will be conducted for alternative identification and determination of environmental elements to be analyzed. It is assumed that NEPA discipline reports (DRs) will be prepared for the following environmental elements: wetlands, waterways, floodplains, fish and wildlife, vegetation, visual quality, cultural resources (historic, archaeological, and pre-historic resources), land use, economics, and environmental justice. Field studies are anticipated for wetlands, fish and wildlife, vegetation, visual quality, and cultural resources. Other environmental elements may be added during scoping. The DRs will include studies and coordination, methods, affected environment, and environmental impacts of the one action alternative compared to no action.

Environmental mitigation design will likely be required in the event that impacts cannot be avoided or minimized. Mitigation design usually involves a multidiscipline team to plan and design mitigation such as wetlands or riparian habitat. The mitigation work begins with development of conceptual mitigation plans as provided in the EA. Conceptual mitigation plans are usually expanded into detailed mitigation plans that include proposed monitoring plans. It also includes taking the project through final design to bid documents which include construction specifications and design drawings. Environmental on-site construction and mitigation monitoring assistance, involving a multidiscipline team, would likely be required.

National Historic Preservation Act - 106 Process

The proposed rehabilitation of the St. Mary's Diversion system has several jurisdictional and administrative aspects due to the involvement of multiple Federal, Tribal and State entities. The jurisdiction issue may have a significant impact to the cultural resource procedures and review process for this project. Establishing a Memorandum of Understanding (MOU) between the various Federal, Tribal and State entities is recommended to clearly define the cultural resource procedures for this project.

The project clearly meets the definition of a federal undertaking for purposes of Section 106 and 110 of the National Historic Preservation Act (NHPA). It is therefore subject to federal legislation requiring cultural resource inventory in compliance with the NHPA (Public Law 89-665, as amended), Executive Order 11593 (Protective and Enhancement of the Cultural Environment), and the National Environmental Policy Act. The lead agency will be the Bureau of Reclamation. The Bureau of Indian Affairs and the Army Corps of Engineers may also be involved with cultural aspects of the project.

As the project lies entirely on the Blackfeet Indian Reservation, the Blackfeet Tribal Historic Preservation Office (THPO) will be the primary Section 106 compliance reviewer. The role of the THPO is defined the same as the Montana State Historic Preservation Office (SHPO), that is, to conduct Section 106 compliance reviews. The THPO is recognized by and bound to National Park Service (NPS) standards and its staff must include specialists in history, archaeology, architectural history and other fields who meet NPS professional standards. If the THPO staff does not meet these standards, duties may be deferred to the SHPO or the Advisory Council on Historic Preservation (ACHP). It is unlikely that the Blackfeet THPO will be able to meet the NPS standards, so outside assistance may be required in one or more area. The lead agency may also defer review to the ACHP.

The project will be subject to the American Indian Religious Freedom Act (AIRFA) and Native Americans Graves Protection and Repatriation Act (NAGPRA). And because any archaeological materials, if discovered, will occur on Blackfeet tribal lands, the standard of the Archaeological Resources Protection Act (ARPA) must be met (that is, data recovery must be professionally

supervised, follow an approved mitigation plan and be conducted to professional standards (per 36 CFR 79). Tribal Employment Rights Office (TERO) requirements will be included in all cultural resource investigations associated with this project.

Three general aspects of cultural resource concerns have been identified. First, the existing diversion system to be replaced is a historic structure that qualifies for the National Register of Historic Places (NRHP) under multiple criteria. Documentation of its historic context and the facilities history, as well as implementation of an appropriate mitigation strategy, will be required. Second, as a federal undertaking, a cultural resource inventory of the Area of Potential Effect (APE) will be required, per Section 110 of the NHPA. The project will require a Class III (intensive) pedestrian inventory and assessment of all as yet unknown resources, including archaeological, paleontological and historical properties, within the Area of Potential Effect. Third, the "living history" or ethnographic/traditional cultural effects of the project will need to be identified and addressed.

The historic St. Mary's diversion system will be eligible for the NRHP under Criteria A, for its association with events that have made a significant contribution to the broad patterns of our history. The system will also be eligible for the NRHP under Criteria C, for embodiment of distinctive characteristics of a type, period or method of construction. Criteria B, that is, association with the lives of persons significant in our past, may also be applicable pending the development of a historic context. The preparation of a comprehensive historic context for the diversion system as well as historic documentation of the facilities construction and maintenance history will be required to support the NRHP significance of the system. Also included are two ancillary historic bridges and the BOR administrative field office and work camp associated with the construction of the system. As the diversion system is slated for complete replacement and reconstruction, determination of an adverse effect to its NRHP eligibility is expected. Approval and implementation of an appropriate mitigation plan will be required. Typically historic and photographic documentation to the standards of the Historic American Engineering Record (HAER) fulfill mitigation needs or this type of project.

Preliminary research materials will include BOR records of the St. Mary's diversion system and other historic documentation of the system and the local area. A review of the Montana State Historic Preservation Office, the cultural records office at the University of Montana and the Blackfeet Tribal Historic Preservation Office will also be required prior to fieldwork. Historic records of the St. Mary's - Milk River Project may also be found at the National Archives and Records Administration Denver Office.

The Class III (intensive, pedestrian) inventory and assessment of the Area of Potential Effect will establish the baseline cultural resource data. This inventory would ideally take place early in the process to allow time for fieldwork, dissemination of results and agency review of resource assessments. Furthermore, the identification of significant cultural resources may necessitate additional work.

Anticipated cultural resources, in addition to the diversion system and related structures and facilities, may include two historic allotment or homestead complexes, depending upon the determination of the width of the APE. There is moderate to low potential for prehistoric archaeological resources in the area. Anticipated archaeological resources in the region include aboriginal campsites, surface stone features such as rock cairns, alignments and tipi rings, lithic tool manufacture sites and bison kill sites. The St. Mary's River valley floor is heavily scoured by seasonal runoff and is unlikely to contain archaeological materials adjacent to the canal. The final determination of the APE will obviously affect the potential for archaeological resources. Paleontological resources within the Cretaceous Formations of the project area are also possible.

The effects of the proposed undertaking to Blackfeet "living history," including ethnographic/traditional cultural properties will need to be identified and addressed. The Blackfeet THPO office or their designee will identify the extent of study necessary to properly evaluate these effects and will coordinate the selection of the appropriate person(s) to conduct this work.

Places of significance to Blackfeet cultural tradition may be found near the canal corridor. Indirect effects, such as construction noise intruding on ceremonial use of an adjacent traditional cultural site, or visual impacts, should be considered.

The Class III inventory of the APE should ideally take place as early as possible in the project schedule to allow time for fieldwork, dissemination of results and agency review of resource assessments. Also, in the event of unanticipated discoveries, additional documentation and mitigation time may be required. Establishing an MOU prior to the start of the project would allow expeditious scheduling, for example, by prior agreement, canal construction could commence concurrently with the preparation of a HAER document or other mitigation report.

Fieldwork will have to be limited to snow-free conditions, essentially May through October. Although the boundaries of the APE have not been determined, the anticipated boundaries would be approximately 30 miles long and up to 400 ft wide.

The Class III inventory, if conducted by the consultant team, would be conducted by two archaeologists, assisted by one or two tribal representatives, over a period of about six to seven field days. Some of the data for ethnographic/traditional cultural concerns as well as some documentation of the diversion system itself could be collected concurrently with the pedestrian inventory. The Class III inventory report preparation may require up to 45 days, including historic research. The ethnographic/traditional cultural report will take an undetermined amount of time. Agency review may take up to 30 days.

HAER documentation is the preferred mitigation for adverse effect to the diversion system. Three to five field days may be required to complete HAER documentation various significant components of the diversion system. The HAER document itself may require as much as 30 days to prepare. The mitigation plan(s) should be negotiated between the agencies to allow concurrent commencement of construction work if possible.

6.4.3 Fish & Wildlife Coordination Act and Endangered Species Act Processes

The BOR recommended that the project follow the provisions of the Fish and Wildlife Coordination Act in order to develop project alternatives that would avoid and minimize environmental impacts. This is an early coordination process that allows funding of the USFWS collaboration early in the project. The outcome of this process would help determine the type of NEPA document needed.

Environmental coordination with the consultant team will occur to avoid, minimize and mitigate environmental impacts. Key points of interaction include: 1) provide environmental information and GIS mapping to engineers so alternative development can avoid and minimize impacts; 2) coordinate with engineers to determine reasonable and feasible alternatives to meet the project's purpose and need and to evaluate/screen alternatives; 3) if impacts are unavoidable, work with engineers to identify mitigation measures. For example, maintenance of wetlands and riparian habitat adjacent to canals through innovative design features.

The BOR has place priority in Endangered Species Act compliance for the St. Mary Rehabilitation. It is anticipated that compliance with the Endangered Species Act will involve preparation of Biological Assessments (BA) for several species. The following species would likely be addressed: bull trout, bald eagle, grizzly bear, Canadian lynx, gray wolf, slender moonwort (plant). This species list may change through consultation with USFWS, MFWP, or the Blackfeet F&W Department.

6.5 PRELIMINARY SCOPE, COSTS & SCHEDULE

6.5.1 Proposed Scope of Work

Environmental documentation and permitting efforts have been identified in 14 tasks for the Preliminary Environmental Scope of Work. These tasks are provided to convey the necessary scope of work as currently understood, however tasks may be modified as the project Purpose and Need is developed and as Tribal, Agency and Public scoping proceeds.

Task 1 - Project Kickoff/Information Review/Work Plan/Define Purpose & Need & Initiate Fish &Wildlife Coordination Act - The purpose of this task is to provide a coordinated start-up for the project by presenting and having stakeholder agreement on the project work plan, purpose and need for the St. Mary Rehabilitation and to initiate early coordination on fish and wildlife needs related to the project.

Task 2 - Tribal and Agency and Public Scoping Meetings/Issue Identification - The purpose of this task is to discuss with all stakeholders the project's purpose and need, alternatives, and potential environmental impacts to provide guidance for completion of the NEPA documentation.

Task 3 - Field Reconnaissance and Environmental Constraints Mapping/Cultural Resources Inventory - The purpose of this task is to conduct necessary environmental field work to determine baseline conditions for alternative development and preparation of environmental documentation to meet NEPA, NHPA 106 and F&WCA requirements.

Task 4 - Define Alternatives - Efforts to Avoid, Minimize, and Mitigate through F&W CA - The purpose of this task is to integrate environmental needs into the preliminary design of project alternatives and to develop a range of reasonable and feasible alternatives.

Task 5- Alternatives Screening - The purpose of this task is to screen and select a preferred alternative to be addressed in the environmental documentation. This would involve stakeholders in the screening process.

Task 6 - Prepare Draft Discipline Reports - The purpose of this task is to prepare technical reports and selected environmental elements to define the affected environment, environmental impacts, and mitigation. These documents serve as the technical basis for the EA preparation. This would also include the draft report for compliance with the Fish and Wildlife Coordination Act.

Task 7 - Prepare Final Discipline Reports - These reports would be finalized after receipt of review comments by the Tribe, BOR, and other cooperating agencies, and interested permitting agencies.

Task 8 - Prepare Draft EA - The purpose of this task is to prepare the draft Environmental Assessment for review by the Tribe, BOR, and other cooperating agencies. The EA would be finalized and published for public review.

Task 9 - Prepare BA - The purpose of this task would be to prepare the required biological assessments and conduct consultation on ESA species with the USFWS and the BOR.

Task 10 - Prepare Draft EA Comment Analysis - The purpose of this task is to review EA public comments and prepare draft responses for review by the Tribe, BOR, and other cooperating agencies.

Task 11 - Prepare Final EA and FONSI - The purpose of this task is to prepare final Environmental Assessment with responses to comments and publish for use by the BOR for FONSI development and public review.

Task 12 - Prepare NHPA 106 Compliance Documentation - The purpose of this task is to provide necessary cultural resource documentation and coordination.

Task 13 - Apply for Tribal Permits - The purpose of this task is to use the NEPA and 106 environmental documentation as a technical basis to obtain Tribal permits for the rehabilitation work. Other permits under Federal and State authority would be prepared, if necessary.

Task 14—Compile and Maintain Administrative Project Record and Project Management - The purpose of this task is to effectively manage the project through completion.

6.5.2 Environmental Study Costs

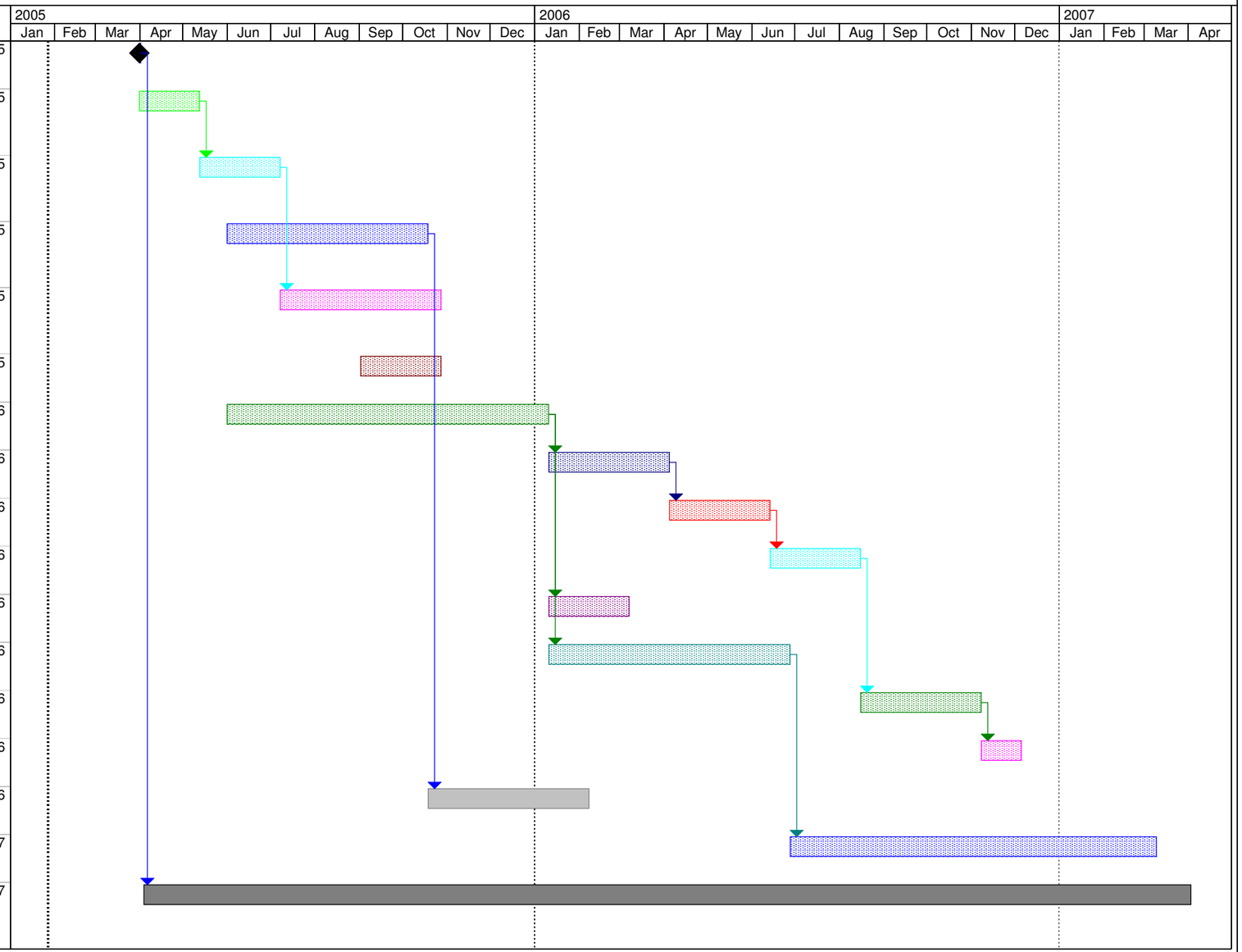
We have estimated a preliminary environmental compliance and permitting cost of between $262,500 and $1,000,000 including 5% Tribal fees. These funds will allow us to conduct tasks stated above and will be significantly influenced by our work plan development and scoping. The higher cost approach allows key tasks to collect field data which will aid alternatives screening, provide early coordination with resource agencies on mitigation, and provide Discipline Reports as technical back-up to the Environmental Assessment. However, if field-based environmental inventories (for example, wetland delineations) and related technical analyses are deferred until the time of final facility design, similar to recent BOR Water System Projects, the NEPA EA cost could be reduced to around $262,500. In this lower cost approach, the NEPA EA will be considered more of a Programmatic EA. Permit costs would be deferred to a later phase of the project.

6.5.3 Estimated Schedule

A preliminary project schedule for the environmental compliance phase is shown on Figure 6.3; the project duration is estimated at 24 months and will be a function of the actual scope of work.

Environmental Phase Schedule - St Mary Diversion Facilities

ID	Task Name	Duration	Start	Finish
1	Obtain notice to Proceed	1 day	Fri 4/1/05	Fri 4/1/05
2	Task 1 - Project Kickoff/Information Review/Work Plan/Define Purpose & Need & Initiate Fish &Wildlife Coordination Act	30 days	Fri 4/1/05	Thu 5/12/05
3	Task 2 - Tribal and Agency and Public Scoping Meetings/Issue Identification	40 days	Fri 5/13/05	Thu 7/7/05
4	Task 3- Field Reconnaissance and Environmental Constraints Mapping/Cultural Resources Inventory	100 days	Wed 6/1/05	Tue 10/18/05
5	Task 4 - Define Alternatives - Efforts to Avoid, Minimize, and Mitigate through F&W CA	80 days	Fri 7/8/05	Thu 10/27/05
6	Task 5- Alternatives Screening	40 days	Fri 9/2/05	Thu 10/27/05
7	Task 6 - Prepare Draft Discipline Reports	160 days	Wed 6/1/05	Tue 1/10/06
8	Task 7 - Prepare Final Discipline Reports	60 days	Wed 1/11/06	Tue 4/4/06
9	Task 8 - Prepare Draft EA	50 days	Wed 4/5/06	Tue 6/13/06
10	Public Release of EA	45 days	Wed 6/14/06	Tue 8/15/06
11	Task 10 - Prepare Draft EA Comment Analysis	40 days	Wed 1/11/06	Tue 3/7/06
12	ESA Consultation	120 days	Wed 1/11/06	Tue 6/27/06
13	Task 10 - Prepare Draft EA Comment Analysis	60 days	Wed 8/16/06	Tue 11/7/06
14	Task 11 - Prepare Final EA and FONS	20 days	Wed 11/8/06	Tue 12/5/06
15	Task 12 - Prepare NHPA 106 Compliance Documentation	80 days	Wed 10/19/05	Tue 2/7/06
16	Task 13 - Apply for Tribal Permits	183 days	Wed 6/28/06	Fri 3/9/07
17	Task 14—Compile and Maintain Administrative Project Record and Project	521 days	Mon 4/4/05	Mon 4/2/07



Project: enviro sch
Date: Thu 1/27/05

Task
Split
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Split
Rolled Up Milestone
Rolled Up Progress
External Tasks
Project Summary
External Milestone
Deadline

Figure 6.3